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Amendment under 37 CFR 1.111
Reply to Office Action dated January 13, 2005
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AMENDMENTS TO THE CLAIMS

Please substitute the following claims for the pending claims with the same numbers, respectively:

Claim 1 (Currently Amended): A system for dynamically generating and processing a program by connecting a server computer and at least one of a client computer and a data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and then processing at least one unit-program for data processing, said system comprising:

a functional module storage means for storing a plurality of functional module classes is provided in the client computer, wherein each of said functional module classes has a coded processing logic ~~for processing~~ comprising at least a portion of the unit-program;

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a configuration information storage means for storing a plurality of configuration information including at least request information to read out at least one of the functional module classes and a processing condition, said configuration information storage means being provided in the server computer;

a definition information input means for inputting at least one definition information to declare the contents of a data processing process to be executed, said definition information input means being provided in the client computer;

a configuration information read-out means for reading out at least one of the configuration information corresponding to said at least one of the definition information from said configuration information storage means, said configuration information read-out means being provided in the server computer;

a unit-program generating means for reading out at least one of the functional module classes corresponding to said at least one of the configuration information from said functional module storage means, said unit-program generating means being provided in the client computer, wherein said unit-program generating

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means dynamically generates a unit-program by using the coded processing logic from said functional module classes; and

a unit-program processing means for dynamically executing said unit-program by using said processing condition included in said configuration information, said unit-program processing means being provided in the client computer.

Claim 2 (Currently Amended): A system as defined in claim 1, further comprising a configuration information request means for requesting at least one of the configuration information for executing the data processing, said configuration information request means being provided in the client computer,

said configuration information storage means for storing the configuration information corresponding to the data processing to be executed, wherein said configuration information have been used for generating the data of the unit-program,

said configuration information read-out means reads out the configuration information from said configuration information storage means based on the request from said configuration information request means.

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Claim 3 (Currently Amended): A system for dynamically generating and processing a program by connecting a server computer and a client computer via a network means, sending and receiving data therebetween, and executing the desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing, said system comprising:

a functional module storage means for storing a plurality of functional module classes, said functional module storage means being provided in the client computer, wherein each of said functional module classes comprises a coded processing logic for processing at least a portion of the unit-program;

a configuration information storage means for storing a plurality of configuration information corresponding to each of a plurality of data processing processes, said configuration information storage means being provided in the server computer, wherein said configuration information includes at least request information to read out at least one of the functional module classes and a processing condition;

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a configuration information request means for requesting at least one of the configuration information for executing the data processing process, said configuration information request means being provided in the client computer;

a configuration information read-out means for reading out at least one of the configuration information from said configuration information storage means corresponding to said request from the configuration information request means, said configuration information read-out means being provided in the server computer;

a unit-program generating means for reading out at least one of the functional module classes corresponding to said at least one of the configuration information from said functional module storage means, said unit-program generating means being provided in the client computer, wherein said unit-program generating means dynamically generates a unit-program by using the coded processing logic from said functional module classes; and

a unit-program processing means for dynamically executing said unit-program based on said processing condition included in

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said configuration information, said unit-program processing means being provided on the client computer.

Claim 4 (Original): A system as defined in claim 1, wherein said configuration information storage means stores at least one functional module class having a coded processing logic for handling at least one of a variable data and a parameter,

said definition information input means inputs at least one of definition information to declare the contents of the data processing process and at least one of the variable data and the parameter,

said configuration information read-out means reads out at least one of the configuration information from said configuration information storage means corresponding to said at least one of the definition information and the request from said configuration information request means, and

said unit-program generating means reads out at least one of the functional module classes including at least one functional module class from said functional module storage means

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corresponding to said at least one of the configuration
information,

wherein the unit-program generating means dynamically
generates the unit-program by using both the coded processing
logic from said functional module classes and said at least one
of the variable data and the parameter included in the
configuration information.

Claim 5 (Cancelled):

Claim 6 (Cancelled):

Claim 7 (Currently Amended): A system as defined in claim 5
1, wherein said server computer further comprises said functional
module storage means, said unit-program generating means, said
unit-program processing means and a processing result output
means which returns a processing result of the unit-program to at
least one of the client computer, the server computer and the
data processing server computer.

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Claim 8 (Original): A system as defined in claim 1, wherein said data processing server computer comprises said functional module storage means, said unit-program generating means and said unit-program processing means.

Claim 9 (Original): A system as defined in claim 1, wherein said definition information includes information relating to a combination of the functional module classes and a processing order of the functional module classes for executing the data processing process.

Claim 10 (Original): A client computer in a system for dynamically generating and processing a program by connecting to a server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for a data processing process, said client computer comprising:

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a functional module storage means for storing a plurality of functional module classes, wherein each of said functional module classes comprises a coded processing logic for processing at least a portion of the unit-program;

a definition information input means for inputting at least one definition information to declare the contents of a data processing process to be executed;

a unit-program generating means for reading out at least one of said functional module classes corresponding to at least one of the configuration information from said functional module storage means when said at least one of the configuration information including at least request information to read out at least one of said functional module classes and a processing condition are sent from the server computer, and then generating a unit-program by using the coded processing logic from said functional module classes; and

a unit-program processing means for dynamically executing said unit-program based on said processing condition included in said configuration information.

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Claim 11 (Original): A client computer as defined in claim 10, wherein said server computer stores the configuration information used to generate the unit program corresponding to the data processing to be executed, said client computer further comprises a configuration information request means for requesting at least one of the configuration information corresponding to the data processing to be executed.

Claim 12 (Original): A client computer in a system for dynamically generating and processing a program by connecting to a server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing, said client computer comprising:

a functional module storage means for storing a plurality of functional module classes, wherein each of said functional module classes comprises a coded processing logic for processing at least a portion of the unit-program;

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a configuration information request means for requesting configuration information to be sent to the client computer corresponding to the data processing to be executed;

a unit-program generating means for reading out at least one of said functional module classes corresponding to at least one of the configuration information from said functional module storage means when said configuration information including at least read-out information of said functional module class and a processing condition are sent from said server computer based on said request, and then generating the unit-program by using the coded processing logic from said functional module classes; and

a unit-program processing means for dynamically executing said unit-program based on said processing condition included in said configuration information.

Claim 13 (Original): A client computer as defined in claim 10, wherein said functional module storage means stores at least one functional module class having the coded processing logic for handling at least one of a variable data and a parameter,

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said definition information input means inputs at least one of definition information to declare the contents of a data processing process to be executed and at least one of the variable data and the parameter, and

said unit-program generating means reads out at least one of said functional module classes including at least one functional module class for handling at least one of the variable data and the parameter corresponding to said at least one of the configuration information from said functional module storage means when said configuration information including at least information relating to the at least one functional module class based on said definition information or said request for sending the configuration information are sent from the server computer, and dynamically generating the unit-program by using both of the coded processing logic from said at least one functional module class and said at least one of the variable data and the parameter included in the configuration information.

Claim 14 (Original): A server computer in a system for dynamically generating and processing a program by connecting to

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at least one of a client computer and a data processing server computer via a network means, sending and receiving data therebetween, and making at least one of the client computer and the data processing server computer execute a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing, said server computer comprising:

a configuration information storage means for storing a plurality of configuration information including at least request information to read out at least one functional module class and a processing condition, wherein each of the functional module classes comprises a coded processing logic for processing at least a portion of the unit-program; and

a configuration information read-out means for reading out at least one of the configuration information corresponding to at least one definition information from said configuration information storage means when said definition information declares the contents of a data processing process to be executed is sent from the client computer, sending and providing said

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read-out configuration information to at least one of the client computer and the data processing server computer,

whereby at least one of the client computer and the data processing server computer dynamically generates and processes at least one unit-program based on the processing condition included in the configuration information.

Claim 15 (Original): A server computer as defined in claim 14, wherein said configuration information storage means stores at least one of the configuration information which is used for generating said unit-program, corresponding to the data processing, and

said configuration information read-out means reads out at least one of the configuration information corresponding to said request for the configuration information sent from said client computer.

Claim 16 (Original): A server computer in a system for dynamically generating and processing a program by connecting to at least one of a client computer and a data processing server

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computer via a network means, sending and receiving data therebetween, and making at least one of the client computer and the data processing server computer execute a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing, said server computer comprising:

a configuration information read-out means for reading out at least one of configuration information corresponding to a request which corresponds to a data processing to be executed from a configuration information storage means when said request to read out the configuration information is sent from the client computer, sending and providing said read-out configuration information to at least one of the client computer and the data processing server computer,

whereby at least one of the client computer and the data processing server computer dynamically generates and processes said unit-program based on a processing condition included in the configuration information.

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Claim 17 (Original): A server computer as defined in claim 14, wherein said server computer further comprises:

a configuration information storage means for storing a plurality of configuration information coding the coded processing logic for processing at least a portion of the unit-program;

a unit-program generating means for reading out at least one of said functional module classes corresponding to the definition information from said functional module storage means when said definition information for declaring the contents of the data processing process to be executed are sent from said client computer, wherein said unit-program generating means dynamically generates the unit-program by using the coded processing logic from said functional module classes;

a unit-program processing means for dynamically executing said unit-program based on the processing condition included in said configuration information; and

a processing result output means for returning a processing result of the unit-program to at least one of the client computer and the data processing server computer.

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Claim 18 (Original): A method for dynamically generating and processing a program by connecting a server computer and at least one of a client computer and a data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing in at least one of the client computer and the data processing server computer, said method comprising the steps of:

storing a plurality of functional module classes into a functional module storage means and storing a plurality of configuration information into a configuration information storage means, wherein each of said functional module classes comprises a coded processing logic for processing at least a portion of a unit-program processing and said configuration information includes at least request information to read out at least one of the functional module classes and a processing condition;

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inputting at least one definition information to declare the contents of a data processing to be executed via a definition information input means;

reading out at least one of the configuration information corresponding to said at least one of the definition information from said configuration information storage means via a configuration information read-out means;

reading out at least one of the functional module classes corresponding to said at least one of the configuration information from said functional module storage means via a unit-program generating means, and dynamically generating the unit-program processing by using the coded processing logic from said functional module classes via said unit-program generating means; and

dynamically executing said unit-program of the data processing based on the processing condition included in said configuration information via a unit-program processing means.

Claim 19 (Original): A method as defined in claim 18, wherein said method further comprises the steps of:

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storing the configuration information corresponding to the data processing to be executed into said configuration information storage means wherein said configuration information is used for generating the data of the unit-program,

requesting at least one of the configuration information for executing the data processing via a configuration information request means, and

reading out the configuration information from said configuration information storage means based on the request of said configuration information request means via the configuration information read-out means.

Claim 20 (Original): A method for dynamically generating and processing a program by connecting a server computer and at least one of a client computer and a data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing in at least one of the client

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computer and the data processing server computer, said method comprising the steps of:

storing a plurality of functional module classes into a functional module storage means and storing a plurality of configuration information into a configuration information storage means, wherein each of said functional module classes comprises a coded processing logic for processing at least a portion of a unit-program and said configuration information includes at least request information to read out at least one of said functional module classes and a processing condition;

sending the configuration information corresponding to contents of a data processing to be executed via a configuration information request means;

reading out at least one of the configuration information corresponding to said request from said configuration information storage means via a configuration information read-out means;

reading out at least one of said functional module classes corresponding to said at least one of configuration information from said functional module storage means via a unit-program generating means, and dynamically generating the unit-program

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processing by using the coded processing logic of said functional module classes via said unit-program generating means; and

dynamically executing said unit-program processing based on the processing condition included in said configuration information via a unit-program processing means.

Claim 21 (Original): A computer-readable and -recordable media for controlling at least one of a client computer and a data processing server computer comprising a system for dynamically generating and processing a program by connecting a server computer and at least one of the client computer and the data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing in at least one of the client computer and the data processing server computer, said media comprising:

a controlling program for storing a plurality of functional module classes having a coded processing logic;

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a controlling program for reading out at least one of said functional module classes and for dynamically generating a unit-program processing by using the coded processing logic of said functional module classes; and

a controlling program for dynamically executing said unit-program processing based on a processing condition included in said configuration information.

Claim 22 (Original): A computer-readable and -recordable media for controlling at least one of a client computer and a data processing server computer comprising a system for dynamically generating and processing a program by connecting a server computer and at least one of the client computer and the data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing in at least one of the client computer and the data processing server computer, said recordable media comprising:

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a controlling program for storing a plurality of configuration information including at least one functional module read-out information and a processing condition, wherein a plurality of functional module classes code a logic of a data processing process to be executed;

a controlling program for reading out the configuration information and for sending the read-out configuration information to at least one of the client computer and the data processing server computer when definition information to declare the contents of the data processing process to be executed is sent from the client computer;

a controlling program for storing the configuration information including a read-out information for reading out said functional module classes that code the logic of the data processing; and

a controlling program for reading out the configuration information and for sending the read-out configuration information to at least one of the client computer and the data processing server computer when the definition information to

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declare the contents of the data processing process to be executed are sent from the client computer.

Claim 23 (Original): A computer-readable and -recordable media as defined in claim 22, wherein said media further comprises a controlling program for storing at least one of configuration information corresponding to the data processing to be executed, said configuration information is used for generating a unit-program processing, and a controlling program for reading out at least one of the configuration information based on request information for reading out the configuration information corresponding to the data processing to be executed when said request is sent from the client computer.

Claim 24 (Original): A computer-readable and -recordable media for controlling at least one of a client computer and a data processing server computer comprising a system for dynamically generating and processing a program by connecting a server computer and at least one of the client computer and the data processing server computer via a network means, sending and

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receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing in at least one of the client computer and the data processing server computer, said media comprising:

- a controlling program for storing a plurality of functional module classes having a coded process logic;

- a controlling program for outputting a request of the configuration information corresponding to a data processing to be executed;

- a controlling program for reading out at least one of said functional module classes and for dynamically generating a unit-program processing by using the coded processing logic of said functional module classes when the configuration information including at least functional module read-out information and a processing condition are sent from said server computer; and

- a controlling program for dynamically executing said unit-program of data processing based on the processing condition included in said configuration information.

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Claim 25 (Original): A computer-readable and -recordable media for controlling a server computer comprising a system for dynamically generating and processing a program by connecting a server computer and at least one of the client computer and the data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process by dynamically generating and processing at least one unit-program for data processing in at least one of the client computer and the data processing server computer, said media comprising:

a controlling program for storing configuration information including at least functional module read-out information corresponding to a data processing and a processing condition, wherein a plurality of functional module classes code a logic of the data processing; and

a controlling program for reading out the configuration information and for sending the read-out configuration information to at least one of the client computer and the data processing server computer when a request for the configuration

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information corresponding to the data processing to be executed are sent from the client computer.

Claim 26 (Original): A program transfer system for transferring and downloading a controlling program to at least one of a client computer and a data processing server computer comprising a system for dynamically generating and processing a program by connecting a server computer and at least one of the client computer and the data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process, said program transfer system comprising:

a program storage means for storing a controlling program for storing a plurality of functional module classes having a coded processing logic, a controlling program for reading out at least one of said functional module classes when definition information is provided to the server computer and the configuration information including at least functional module read-out information to declare the contents of a data processing process to be executed and a processing condition are sent from

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the server computer, and for dynamically generating a unit-program processing by using the coded processing logic of said functional module classes, and a controlling program for dynamically executing said unit-program of data processing based on the processing condition included in said configuration information;

a program read-out means for reading out the controlling program from said program storage means based on a request from at least one of the client computer and the data processing server computer; and

a transfer means for transferring said read-out controlling program to at least one of the client computer and the data processing server computer.

Claim 27 (Original): A program transfer system as defined in claim 26, wherein said program storage means stores a controlling program which stores at least one of the configuration information corresponding to the data processing to be executed, said configuration information is used for generating the unit-program processing, and reads out at least

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one of the configuration information based on a request for reading out the configuration information corresponding to the data processing to be executed when said request is sent from the client computer.

Claim 28 (Original): A program transfer system for transferring and downloading a controlling program to at least one of a client computer and a data processing server computer comprising a system for dynamically generating and processing a program by connecting a server computer and at least one of the client computer and the data processing server computer via a network means, sending and receiving data therebetween, and executing a desired voluntary data processing process, said program transfer system comprising:

a program storage means for storing a controlling program for storing a plurality of functional module classes having a coded processing logic, a controlling program for outputting a request for at least one of configuration information corresponding to a data processing to be executed, a controlling program for reading out at least one of said functional module

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classes when the configuration information including at least functional module read-out information and a processing condition are sent from the server computer and for dynamically generating a unit-program processing by using the coded processing logic of said functional module classes, and a controlling program for dynamically executing said unit-program processing based on the processing condition included in said configuration information;

a program read-out means for reading out the controlling program from said program storage means based on a request from at least one of the client computer and the data processing server computer; and

a transfer means for transferring said read-out controlling program to at least one of the client computer and the data processing server computer via the network means.

Claim 29 (Original): A program transfer system as defined in claim 26, wherein said server computer comprises said program storage means, said program read-out means and said transfer means.